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Though Mr. Ivory considers that from various sources not calculated on in the original scheme the 4 per cent. assumed rate of interest will probably be realized, yet even on the calculations made at $3\frac{1}{2}$ per cent. interest, a considerable surplus will remain, as appears by the following statement:—

Assets.				£	8.	d.
 Capital as before Value of future contributions 		• • • • •		42,597 18,704		
Amount		••••	••••	61,302	5	3
Obligations. 1. Value of annuities to existing Widows 2. Value of annuities to expected Widows	£ 15,583 36,950	14	4			
3. Entry money as before	52,533 800 3,246	0 11	0 11	56,580	9	5
Leaving a surplus of	• • • • • • • • • • • • • • • • • • • •	••••	····-	£4,721	15	10

With regard to the application of this surplus, Mr. Ivory considered it would be more advisable to allow it to accumulate till the next investigation in 1856, when no doubt a considerable addition may be made to the annuities of widows.

INSTITUTE OF ACTUARIES.

"Nous avons vu depuis longtemps, avec des regrets stériles, s'amoindrir de jour en jour la réputation de notre profession: en cela nous subissons le sort inévitable de toutes les professions que le premier venu peut prendre et exercer sans aucune espèce de contrôle."

"Un remède à un état de choses si déplorable avait toujours paru im-

possible, aussi le mal grandissait-il sans cesse."

"Heureusement quelques uns de nous ont pu comprendre que s'ils ne venaient se ranger sous l'égide d'un lien commun toute solution heureuse serait impossible, et ils ont pensé, avec raison, trouver ce lien dans la formation d'un cercle où tous qui veulent faire la profession honorable et distinguée viendraient apporter le tribut de leurs lumières et de leurs efforts."

WE extract the above paragraphs, with some slight alteration, from Monsieur Dubroca's 'Revue des Assurances.' They are not applied, in that gentleman's able periodical, to the actuarial profession; but they express so happily the condition of that body, and record so appropriately the steps recently taken to remedy that condition, that we have thought we could not do better than preface them as a sort of text to our own observations.

It is now nearly a century and a half since that peculiar science which it appertains to the actuary to cultivate has been called into exercise in this country. The science itself has been well described as

having its origin in the application of the doctrine of probabilities to the affairs of life, and as embracing all monetary questions involving a consideration of the separate or combined effects of interest and probability. Whilst, on the one hand, the growth of institutions which derive their principles of operation from this science has been without parallel both in its extent and rapidity, there has been no want, on the other, of well-skilled professors of it, who have been always at hand to meet the ever-increasing demands of more complicated social relations, and to give the required impulse or check to the vast and multiform institutions arising out of them. What the acquirements are which were thus called into play it would not be easy, in a short notice, to give an idea of; they will be best understood by reference to the writings of such men, amongst many others, as the two Bernouillis, Deparcieux, Duvillard, Kerseboom, Lacroix and Laplace on the continent; Francis Baily, Griffith Davies, De Moivre, De Morgan, Gompertz, Dr. Halley, Jones, Lubbock, Milne, Price and Simpson in this country. These are the productions of philosophers, mathematicians and men of letters. We may be permitted to express a doubt whether they come wholly within the grasp of ordinary professional minds; nevertheless the actuary of the present day must be more or less thoroughly conversant with them, at least with so much of them as relates to his peculiar pursuits; and when this is done, he has mastered merely the principles or theory of his profession. The application of the knowledge thus acquired to the results constantly being gleaned from the wide and inexhaustible fields of statistical inquiry is alone the employment of a life-time; and scarcely will the experience of a life-time perfect the judgement which is to be exercised in the selection of data adapted to one purpose, and the detection of causes which render them unsuited for another. But whilst immersed in these considerations, it is the more immediate business of the actuary's life to carry his applied principles into operation; to construct, in the first instance, the complicated machinery by means of which the various processes with which he has to do are to be regulated; and to keep a watchful eye upon its daily action, that the errors of construction or of operation, if there be such, may be detected and At this stage he enters upon the duties of something like expunged. ordinary commercial life. He must be perfectly master of systems of account far exceeding in intricacy its usual requirements. He should be familiar with the routine at least of banking operations, if not with the doctrines of currency and finance in their more comprehensive character. He will be impeded at every step without a very considerable acquaintance with the principles of common law and the practice of the courts; nor can he be wholly ignorant even of the science of medicine, so far at least as regards the nature of the diseases to which the human frame is liable, and the extent to which they affect its duration. Lastly, it behoves him to possess a clear and sound judgement, with an intellect sufficiently penetrating to detect the numerous fallacies which continually present themselves in this peculiar pursuit, and which all writers on the subject have agreed, occasionally assume a degree of subtlety rarely to be met with in any other branch of philosophical inquiry.

Such are the ordinary and necessary qualifications of a profession, the value and importance of which are to a certain extent indicated by the emoluments it is in general enabled to command, but which not-withstanding is without any recognised position in the social or political circle; and the members of which owe whatever station they may occupy in them rather to ignorance that they are in any way connected with the body, than to the knowledge that they are members of it.

What the causes are of this anomalous state of things we hope on a future occasion to show; and we shall then also endeavour to trace the evils resulting from it, and to point out what we conceive to be their proper remedy.

Progress of the Bill for regulating the Profession of Actuaries in Great Britain and Ireland.

We regret that we cannot report any material advance made towards the accomplishment of the objects contemplated by this Bill.

Eminent parliamentary agents have been consulted upon it, and they have given it as their opinion—

- 1. That the Bill must be introduced as a public one.
- 2. That no previous gazette or newspaper notice will be requisite.
- 3. That it must originate in the House of Commons.

Accordingly application has been made to an influential member of that House, and he, after communication with other members, has expressed an opinion that such a measure must, to have any chance of success, either originate with the government, or at least have their concurrence, obtained through the medium of the Board of Trade or other customary channel.

Thus it appears that nothing short of great unanimity, energy and perseverance on the part of the whole profession, is likely to achieve the accomplishment of this most desirable end. Nevertheless there is no reason to doubt, spite of the difficulties which present themselves, but that a few years of well-directed efforts would obtain for the profession all the advantages which such a measure is calculated to secure, and to which it is unquestionably so justly entitled.

Proceedings of the Institute of Actuaries of Great Britain and Ireland.

Peter Hardy, Esq., V.P., in the Chair.

Second Sessional Meeting, 1850-51. Monday, 30th December, 1850.

The Minutes of the last Sessional Meeting having been read and confirmed, the Vice-President announced the following presentations to the Library:—

	Presented by
A Paper on the Comparison of Various Tables of Annui-	
ties. By Sir J. W. Lubbock, Bart. Published in the	
Cambridge Philosophical Transactions in 1829	The Author.
British Almanac and Companion, 1847	Mr. Lewis.
Haves on Annuities, 2nd edition, 1747	Mr. Noble.
Dryden's Juvenal and Persius	Mr. Porter.
Les Aventures de Télémaque, by Fénelon	do.
Library of Entertaining Knowledge, 23 vols	do.
Paley's Natural Theology	do.

Investigation of Mortality in the Indian Army. By	do. do.		
The following Candidates, duly proposed at the last were elected, viz.	Sessional Meeting,		
Charles Douglas Singer, as an Official Associa Henry Appleby, William Beverley, Christian Child, George Doncaster, Henry Thomson, jun., Francis Henry Unwin, Algernon Pelham Smith Valentine,			
Mr. Peter Gray, F.R.A.S., then read a paper "On the Probability of Survivorship between Two Lives."	e True Measure of		
Third Sessional Meeting, 1850-51. Monday, 25th November, 1850. Peter Hardy, Esq., V.P., in the Chair. The Minutes of the last Sessional Meeting having been read and confirmed,			
the Vice-President announced the following contribution viz.—	Presented by		
Report on the Fund for a Provision for the Widows and Children of the Ministers of the Church in Scotland. By W. T. Thomson, F.R.S.E Gale (S.) on Contingent and Eventual Losses, and on Insurance	The Author.		
Banking in Scotland, History thereof. By W. J. Lawson	Mr. Jenkin Jones.		
Canada. By a Barrister	do. do.		
Canada. By a Barrister	do. do. do. do.		
Canada. By a Barrister	do. do. do. do. do.		
Canada. By a Barrister	do. do. do. do.		
Canada. By a Barrister Companion to the Almanac for the Years 1830, 1834, 1835, 1839 Dublin Review, August 1841 Eclipses. By W. S. B. Woolhouse Edinburgh Review, April 1838 Education—Minutes of Committee of Council, 1844 Education—Recent Measures for the Promotion thereof, 1839 (3 copies) Education—First Report of the Statistical Society thereon	do. do. do. do. do. do.		
Canada. By a Barrister	do. do. do. do. do. do. do. do.		

	Presented by
Fever—Observations on the Generation thereof. By	N. I. 1. I. I.
Dr. W. P. Alison (2 copies)	
Halley's Comet. By Lieut. W. S. Stratford, R.N.	do.
Health of Towns' Association—Report on Lord Lin-	a.
coln's Bill	do. do.
Insurance—An Essay thereon, 1828 (3 copies)	uo.
Islington Literary and Scientific Society—Ninth Annual Report	do.
nual Report	uo.
Noole 1840	do.
Neale, 1840	do.
——————————————————————————————————————	do.
Law Reform—The Principles thereof, 1835	do.
Leicester—A Plan for the Improvement thereof	do.
London Welsh Provident Society—Rules thereof,	
1838	do.
1838	do.
Police (General), Letter thereon. By W. A. Miles,	
1836	do.
Prisons—Third Report of the Inspectors, 1838	do.
Railways-Demoralization and Injuries resulting	
	do.
therefrom	
Sanitary Progress—Fifth Report of the National	do.
Sanitary Progress—Fifth Report of the National	_
Philanthropic Association	do.
Sanitary Condition of the Labouring Classes, Re-	
ports thereon, 29 in number Scottish Population—Statistical Report, 1837	do.
Scottish Population—Statistical Report, 1837	do.
Simpson's Algebra, 4th edition, 1775	do.
Teeth—A Test of Age. By E. Saunders	do. do.
Tides—An Elementary Treatise thereon. By J. W.	do. do.
Lubbock, F.R.S. (3 copies), 1839 Tides—Observations thereon. By J. W. Lubbock,	uo.
FDC 1020	do.
F.R.S., 1838	do.
Statistical Society—Journals thereof, 10 humbers .	uo.

The following Candidates, duly proposed at the last Sessional Meeting, were elected Associates, viz.

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James Meikle.
Frank L. H. Collins.
Frederick William Driver.
                                          Henry Offord.
John Caulfield Hannyngton, Capt. 24th
  Regt. B.N.I., Deputy Commissioner
  of the Province of Chowtanagpore in
  the Bengal Presidency.
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James Peyton. Frederick William Rowlatt.

A paper, by Mr. Spens, was then read, entitled "Is there a Materially greater Risk in the Assurance of a Select Life of from 40 to 45 than of a Select Life of from 20 to 25 for one year?"

Fourth Sessional Meeting, 1850-51. Monday, 24th February, 1851.

Peter Hardy, Esq., V.P., in the Chair.

The Minutes of the last Sessional Meeting having been read and confirmed, the Vice-President announced the following contributions to the Library:-

	Presented by
Leslie's Elements of Geometry, 2nd edition	Mr. David Jones.
Tables of Mortality, deduced from the Experience of	
the Amicable Society. By Thomas Galloway,	
M.A., F.R.S., F.R.A.S	do.
British Almanac and Companion for 1849	Mr. Knowles.
British Almanac and Companion for 1846	Mr. W. Lewis.
Mr. John Coles, duly proposed at the last Sessional Me	eting, was elected
an Associate.	
Mr. Jellicoe then read a paper "On the Rates of Prem	ium to be charged
for Assurances on the Lives of Military Officers Serving in	Bengal."

Fifth Sessional Meeting, 1850-51. Monday, 31st March, 1851.

Charles Jellicoe, Esq., V.P., in the Chair.

The Minutes of the last Meeting having been read and confirmed, the Vice-President announced that the following contributions had been made to the Library, viz.— Procented by

	Presented by
British Almanac and Companion for 1848	Mr. Laurence.
General Board of Health, Report thereof	Mr. Colvin.
—— ——, Appendix A	do.
———. Appendix B	do.
British Almanac and Companion for 1848	Mr. Pinckard.
A Property and Income Tax—the Best Tax for the	
Community. By E. Erskine Scott, F.S.A., and	
Manager and Actuary to the East of Scotland	
Assurance Company	The Author.
Assurance and Annuity Tables. By Peter Gray,	
F.R.A.S., A.I.A., Henry Ambrose Smith, F.I.A.,	
and William Orchard, F.I.A	The Authors.
Bridge (Rev. B.), Elements of Algebra, 1st edition,	
1811	Mr. Pateman.
Colson (N.), The Mariner's New Kalendar, 1706	do.
Garnier (I. G.), Élémens d'Algèbre, 1811	do.
Reynard (F.), an Elementary System of Theoretical	
Geometry, 1813	do.
Stevenson (R.), A Treatise on the Theory of Equa-	
tions, 2nd edition, 1835	do.
Taylor's (C.) Elements of Algebra; compiled from	
Garnier's translation of Euler, 1824	do.
Vince (Rev. S.), A Treatise on Fluxions, 5th edi-	
tion, 1818	do.
————, The Principles of Hydrostatics, 4th	
edition, 1812	do.
, Treatise on Plane and Spherical Trigo-	_
nometry, 3rd edition, 1810	do.
Wood (I.), Elements of Algebra, 3rd edition, 1801	do.
Woodhouse (R.), A Treatise on Plane and Spheri-	
cal Trigonometry, 3rd edition, 1819	do.
The following Candidates duly proposed at the las	t Sessional Meeti

The following Candidates, duly proposed at the last Sessional Meeting, were elected, viz.

George Stewart, as an Official Associate. Elwin Henry Owen, as an Associate.

Mr. Higham read a paper "On the Value of Selection as Exercised by the

Policy-Holder against the Company in discontinuing Policies on Healthy Lives, and maintaining in force those on Bad or Doubtful Lives."

The Vice-President announced that the Council had passed the following Resolution, which it was intended should form one of the Bye-Laws of the Institute, viz.

"That persons who shall not have been officially connected with an Assurance Society for a period of five years or upwards shall be inadmissible as Members of the Institute unless they be approved by two-thirds of the Members of the Council assembled at any Ordinary Meeting."

We have received from Mr. Porter, of the Alliance Assurance Company, "Solutions of the Questions proposed to Candidates for the 'Certificate of Competency' at the second day's examination in June last." We regret that it has been found impossible to make room for them. They shall appear in our next Number if practicable.

List of the Members of the Institute of Actuaries of Great Britain and Ireland, 30th April 1851.

FELLOWS AND OFFICIAL ASSOCIATES.

Those marked thus * are Fellows.

Name of Member.	Name of Assurance Company.
Auld, John Gunn	Colonial.
*Bailey, Arthur Hutcheson.	
*Balfour, Robert	City of Glasgow, Edinburgh.
*Baylis, Edward	
*Bell, Thomas	
*Berridge, Joseph.	
*Borthwick, Archibald	City of Glasgow, Glasgow.
*Borthwick, James	North British, Edinburgh.
*Boult, Swinton	Liverpool and London, Liverpool.
Brettell, Joseph Cartwright	Royal Naval, Military, and East India.
*Brown, Samuel	Mutual.
*Brown, James.	
*Browne, William Meredith	Westminster and General.
*Bunyon, Charles John, M.A	Norwich Union.
Burr, Thomas Alfred	Kent Mutual.
*Callender, Henry.	
Camroux, Ferdinand F	Metropolitan Counties and General.
Chalmers, William.	•
*Christie, Robert	Scottish Equitable, Edinburgh.
*Clark, George	Argus.
*Cleghorn, Joseph John.	-
*Compton, Theodore	U.K. Temperance and General Provident.
Cook, William	Scottish Equitable.
Cope, Charles James.	
*Crocker, James Sydney	New Equitable.
*Cunningham, William	
*Daniell, James	Commercial and General.

Name of Member.	Name of Assurance Company.
Davenport, Henry Devereux	Sovereign.
*Davies, Griffith, F.R.S	Guardian.
Dickson, William.	
*Dickie, Henry David	Caledonian, Edinburgh.
*Dickson, Thomas Goldie.	m .
*Dove, Percy Matthew	Royal.
Emmens, William*Esson, George Auldjo	National of Sectland Edinburgh
*Ewart, Peter	Standard
*Farnell, Thomas Willows	Legal and Commercial.
*Farrance, George John	City of London.
*Farren. Edwin James	Asylum Domestic and Foreign.
Farren, Édwin James Fialaison, John, President	National Debt Office.
*Finlaison, Alexander Glen	National Debt Office.
*Finlay, Gilbert Laurie	Edinburgh.
Finlay, William*Fletcher, Alexander Pearson	Northern, Edinburgh.
*Fletcher, Alexander Pearson	Northern.
*Foley, Thaddeus, F.R.A.S.	T.O. A. C. C. A. D.
*Fraser, John	Life Association of Scotland, Edinburgh.
Fraser, Thomas	Life Association of Scotland.
*Gibson, Edward. *Goodchap, William.	
*Gover, William Sutton	British Empire Mutual
Grant, George	Scottish Provident.
Griffith, Charles Fox.	210-14000
*Hampton, John William	Alfred.
*Handcock. Robert	Leeds and Yorkshire.
*Hardy, Peter, F.R.S. *Hardy, James Charles	London Assurance Corporation.
*Hardy, James Charles	National Guardian.
*Hearn, George W.	
Henderson, Benjamin	Liverpool and London.
*Higham, John Adams	
*Hillman, William Edward	Star.
Hodge, William Barwick *Howard, George	Defender
*Hughes, Edward	United Kent
*Ivory, Holmes	National of Scotland Edinburgh
Jago, Geo. W. S.	Translat of Scottana, Bambarga.
*Jellicoe, Charles	Eagle.
*Jones, David	Universal.
*Jones, Jenkin	National Mercantile.
Kelday, John.	
*King, John	North British.
*Knowles, John	London and Provincial Law.
*Laurence, John*Lawson, Charles Lucius	London Assurance Corporation.
	Great Britain Mutual.
Leeks, Edward Frederick. Lendon, Edwin	Kent Fire Office Maidstone
*Lewis Charles Terrell	West of England Exeter
*Lewis, Charles Terrell *Lewis, William	Family Endowment.
Lewis, Charles.	
*Lindsay, Donald	Scottish Widows'.
Liveing, Charles.	
*Lodge, Jeremiah, B.A	Palladium.
Lodge, Robert John	Marine.
Macintyre, Patrick* *McCandlish, J. Macgregor	United Kingdom.
*Mount, John	Caledonian Edinburgh
More, Louis	Mentor.
*Mullinder, Thomas, LL.D	United Guarantee.
Musgrave, Thomas.	Carry Carry Carry Con

Name of Member.	Name of Assurance Company.
*Neison, Francis G. P	Medical, Invalid and General.
*Neison, William	Medical, Invalid and General.
*Newman, William Lewin	Yorkshire.
*Neison, William *Newman, William Lewin *Newman, William Lewin, Jun.	Yorkshire.
*Orchard, William.	
*Oughton, David	General.
*Pearson, Charles.	m
*Peck, Anthony, B.A	Engineers', Masonic, and Universal Mutual.
*Pinckard, George Henry	Clerical, Medical, and General.
*Porter, Henry William.	2 1
Pott, Thomas Alfred	Gresham.
*Rainie, Robert	Life Association of Scotland, Edinburgh.
*Raleigh, Samuel.	0 1
*Ramsay, George	Scottish Union, Edinburgh.
*Ratray, William	Victoria.
*Reddish, John	British.
*Robertson, Alex. Wier.	Landan Indianntable
Robertson, Alexander	Minorate
*Robinson, Wm. Thomas	Milierva.
Robinson, Thomas.	
Rowsell, Charles John.	Train
Scott, William	Fact of Sectland Dunden
*Scott, Ebenezer Erskine	Western
*Scratchley, Arthur, M.A., F.R.A.S Shaw, William	Royal Formers' and General
Singer Charles Dougles	Royal Patmers and General.
Singer, Charles Douglas. *Smith, Edward Osborne	Reliance Mutual
*Smith, James	Northern Glasgow
*Smith, Henry William	Albert
Smith, Frederick Garle	Scottish Union
*Smith William	English and Scottish Law Life, Edinburgh.
*Smith, Henry Ambrose	Northern Aberdeen.
Smylie, Samuel	Standard, Dublin.
*Chana William	Scottish Amicanie, Giasgow.
Spenser, Frederick Charles	Halifax, Bradford, and Keighley.
Stevens James	
Stowart Coorgo	North of England, Sheffield.
*Sylvester, James Joseph, M.A., F.R.S	Equity and Law.
Toit Patrick Machanohten	
*Tower Ismas Michael	Hand-in-hand.
Thicke, Charles James	British Mutual.
*I'hompson, Edward.	
*Thomson, William Thomas, F.R.S.E	Standard, Edinburgh.
*Thomson, Henry Thomas	North British.
*Thomson, George	Merchants' and Tradesmen's.
*Thomson George Augustus	
*Todd, Benjamin Hall	Standard, Edinburgh.
*Todhunter Joseph	National of Ireland, Dublin.
*Tucker, Robert	Pelican.
*Walker, Thomas, B.A.	English Widows Fund and General.
*Watson, James	Abandaan
*Watson, John	Aberdeen.
Watson, John.	
*Welton, Nicholas. *Williams, John Hill	English and Scottish Law Life
*Williams, Henry Jones	University.
*Williams, Henry Jones *Willich, Charles M. Wilkie, James	East of Scotland Life, Edinburgh.
*Wood William	Scottish Amicable, Glasgow.
*Wood, William *Wood, William	Northern Reversion.
*Yeats, Alexander	Aberdeen Mutual Friendly Society.
Leave, Michandel	

ASSOCIATES.

Those marked thus * have passed their Examination.

Name of Member. Name of Member. Appleby, Henry. Laurence, John Philip. Ashurst, William Henry. Logan, Alexander McGregor. Aston, Benjamin Richard. Ball, Henry. Lovelock, Samuel. Macandrew, James McLean. Bampton, James. Beverley, William. Boyer, Henry. Mackenzie, Kenneth. Maclagan, David. Meikle, James. Cheshire, Edward. Moncrieff, John Scott. Child, Christian. Nicholson, Isaac. Christie, Robert John Holder. Noble, Henry. Norton, Fletcher Carioca. Offord, Henry. Clarke, Joseph. Coles, John. Collins, Frank Laird Howard. Colvin, Alexander. Oliver, John Lauer. Owen, Elwin Henry. Cookson, Edward Bryan. Pearson, Arthur. Peyton, James. Preston, William Howell. Rowlatt, Frederick William. Cutbush, Edward. Cutcliffe, George. *Day, Archibald. Scoones, Philip.
Sharpe, Edgar.
Smith, George Frank Stanton.
Stephenson, Charles. Doncaster, George. Driver, Frederick William. Evans, John Llewellyn. Evans, John Llewellyn.
Fisher, Joseph.
Flindt, Rupert.
Grant, George.
Gray, Peter, F.R.A.S.
Grey, William Henry.
Griffith, Thomas Henry.
Criffith, Thomas Henry. Stubbs, Joseph Neatby. Swiney, William. Thomson, Henry, Jun. Tresidder, John Edward. Unwin, Francis Henry. Guild, James Wyllie. [B.N.I. Hannyngton, John Caulfield, 24th Regt. Valentine, Algernon Pelham Smith. Watkins, Charles. Hooper, John. Hutton, T. R. Jones, Edward Turner. West, Frederick. White, William. Williams, Henry Oliver. Keys, George Scott. Winser, Thomas Boorman. Koch, John Edward Campbell. Winter, Robert, Jun.